Coronis Fusion 6MP

用户指南

支持的显示器：

MDCC-6230

BARCO

Visibly yours

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欢迎您！

感谢您选择 CORONIS FUSION 6MP 显示器！

Coronis Fusion 是一套独特的 PACS 显示系统，其设计目的是进一步提升诊断成像的灵活性和生产率。

Coronis Fusion 使用了业界第一个 30 英寸彩色 LCD，该 LCD 可用作两个无缝像素头或一个宽屏显示屏，使您能够自由地按照您的意愿安排您的工作空间。您可在同一个诊断屏幕上并排读取 CT、MR、心超和血管摄影或任何其他组合的数据。

Coronis Fusion 采用最新的突破性内置平板开关 (IPS-Pro) LCD 技术。这项技术将最高级的 LCD 查看功能带到了市场上，为亮度和对比度，甚至广视角定下了新的高标准。

请使用本指南中的说明来安装您的 CORONIS FUSION 6MP 显示器，亲身体验以上所有超凡的功能吧！

本指南中使用了以下标志：

	警告：人身伤害风险		注意：产品损坏风险
	重要说明或指示		注意
	建议、提示		附加信息

请您在操作 CORONIS FUSION 6MP 显示器之前，完整阅读从第 52 页开始的安全信息。

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包装内容

CORONIS FUSION 6MP 显示器随附有：

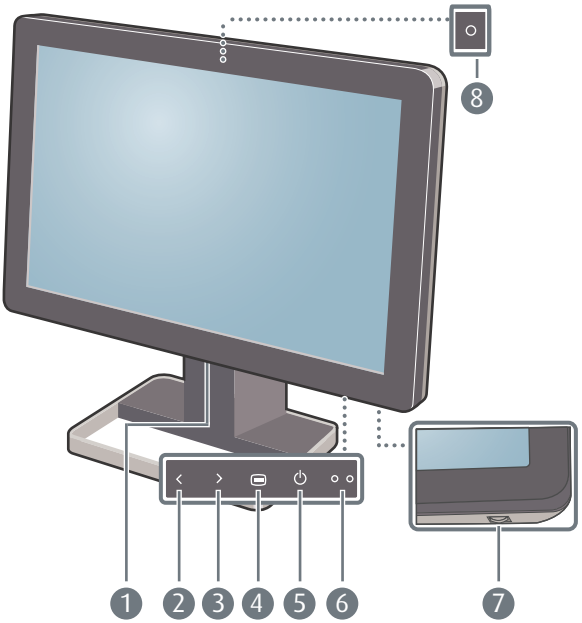
- 本 CORONIS FUSION 6MP 显示器指南
- 一张系统光盘
- 两根 DVI 电缆
- 两根 DisplayPort 电缆
- 一根 USB 电缆
- 一套交流电源线
- 一个外部电源

如果您订购了 Barco 显示控制器，该控制器也连同其附件一起装在包装盒中。在系统 CD 中提供了专门的用户指南。

请保留原包装。原包装专为本显示器设计，可在运输过程中提供理想防护。

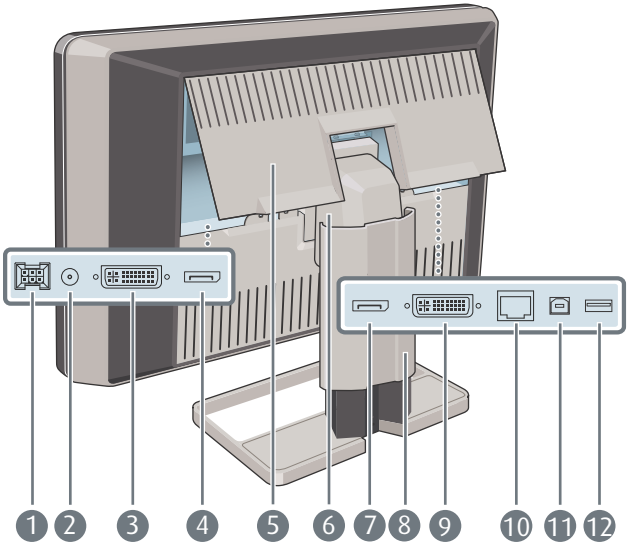
部件、控制器和连接器

前视图



1	USB downstream 下游连接器	2	向左 / 向上键
3	向右 / 向下键	4	菜单 / 输入键
5	待机 / 取消键	6	电源状态指示灯
7	控制轮	8	环境光线传感器

后视图



1	+24 VDC 电源输入	2	+5 VDC，0.5 A 电源输出
3	DVI 2 视频输入	4	DisplayPort 2 视频输入
5	连接器舱盖	6	颈盖
7	DisplayPort 1 视频输入	8	显示器支架罩
9	DVI 1 视频输入	10	以太网连接器 （请参见下文说明）
11	USB upstream 连接器	12	USB downstream 连接器

以太网接口用于维护目的，不支持用户应用程序。

显示器安装

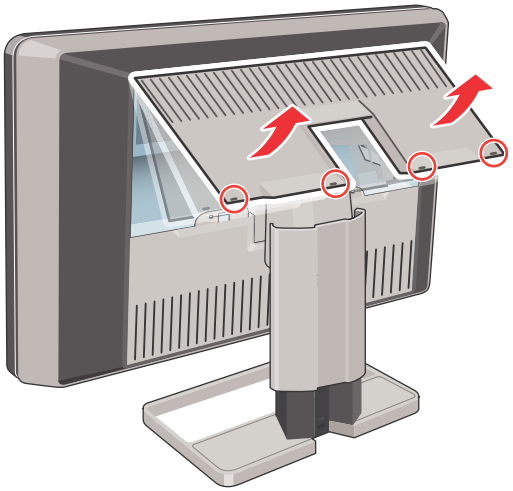
在安装 CORONIS FUSION 6MP 显示器并连接所有必要的电缆前，请确保您的电脑中已物理安装合适的显示控制器。如使用 Barco 显示控制器，请参考系统 CD 中提供的专用用户指南。

拆下罩盖

连接器舱盖

要使用连接器，应当先拆下连接器舱盖。要拆下舱盖，请按以下步骤执行操作：

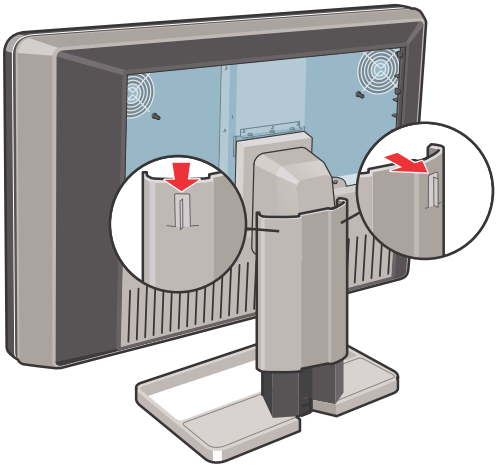
1. 轻轻提起连接器舱盖的一个手柄上的固定夹，松开舱盖的一侧。
2. 在舱盖的另一侧执行相同的操作。
3. 拆下舱盖。



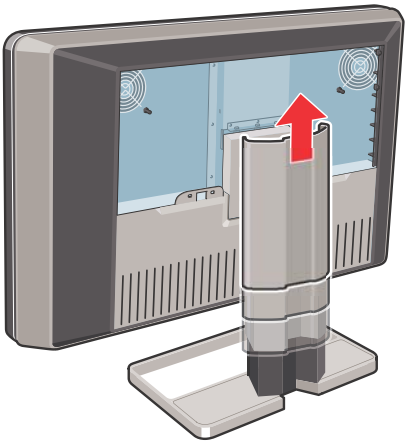
显示器支架罩

要进入布线通道，应当拆下显示器支架罩。可按照以下步骤执行此操作：

1 轻轻按住罩盖上方内侧的固定夹。



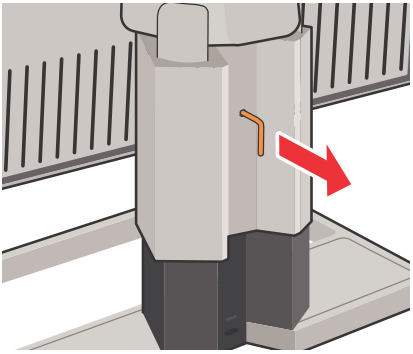
2 一边按住固定夹，一边向上滑动罩盖。



解除高度调校机制

显示器支架中的高度定位系统已在工厂中用红色搭钩锁定，以防止运输过程中损坏。在调节显示器高度位置前您必须先拆下此搭钩。

1 抓紧下推的显示器面板，同时拔出显示器支架中的红色搭钩。

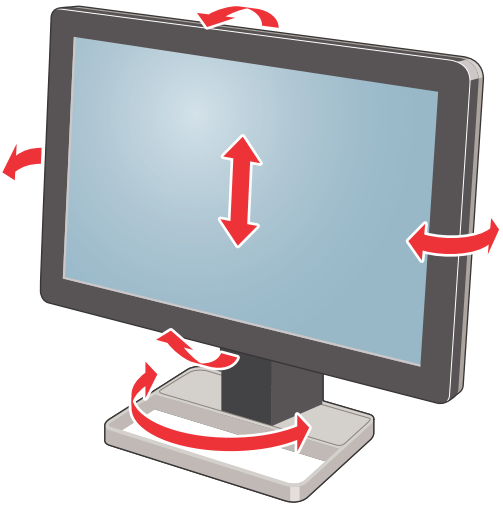


为保存搭钩以备在将来可能进行的运输中使用，请将这一带有红色末端的短搭钩插回显示器支架中。

调节显示器位置

显示器的高度定位系统现在已解锁，您可以根据需要倾斜、旋转、抬高和降低显示器。

⚠ 显示器与支架相连时请勿试图旋转显示器。否则可能会严重损坏显示器及其支架。

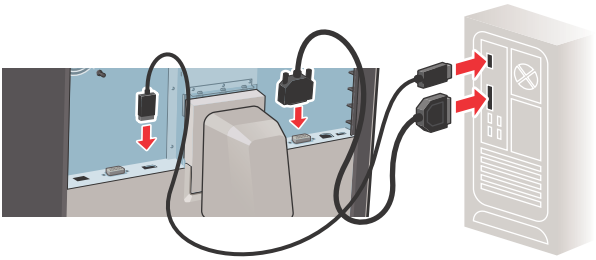


连接信号电缆

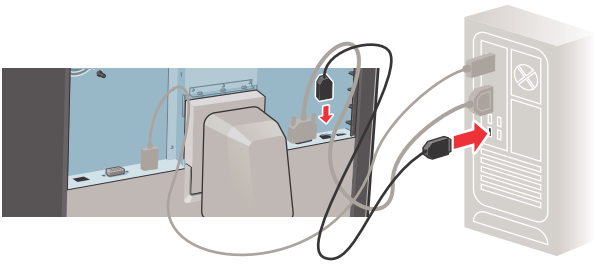
1 使用一根随附的 DVI 或 DisplayPort 电缆，将显示控制器的一头连接到 DVI 1 或 DisplayPort 1 连接器。

2 使用一根随附的 DVI 或 DisplayPort 电缆，将显示控制器的另一头连接到 DVI 2 或 DisplayPort 2 连接器。

> 显示器各侧可连接不同的视频输入（可在一侧连接 DVI，另一侧连接 DisplayPort）。显示器的两侧也可连接相同的视频输入，但每一侧只允许连接一个视频输入。



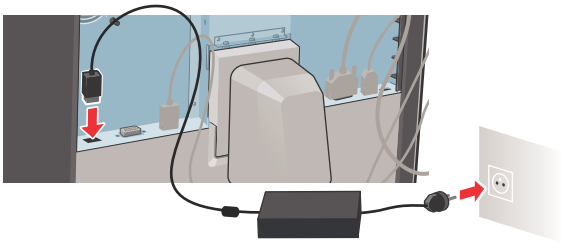
3 如果您想要利用显示器的 USB downstream 连接器，请使用随附的 USB 2.0 电缆将电脑的 USB downstream 连接器连接到显示器的 USB upstream 连接器。



连接电源线

1 将随附的外部直流电源连接到您 CORONIS FUSION 6MP 显示器的 +24 VDC 电源输入。

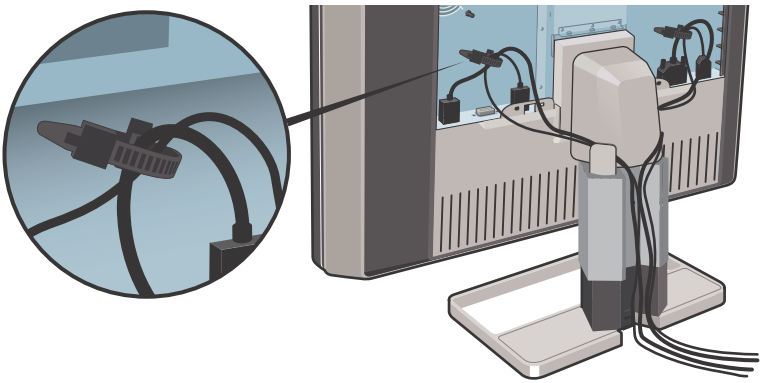
2 使用包装中提供的适配电源线将外部直流电源的另一端插入接地电源插座。



布线

通过显示器支架中的布线通道来分配所有连接的电缆。

连接器舱内的电缆扎带让您能够固定电缆以便更好地保护它们。

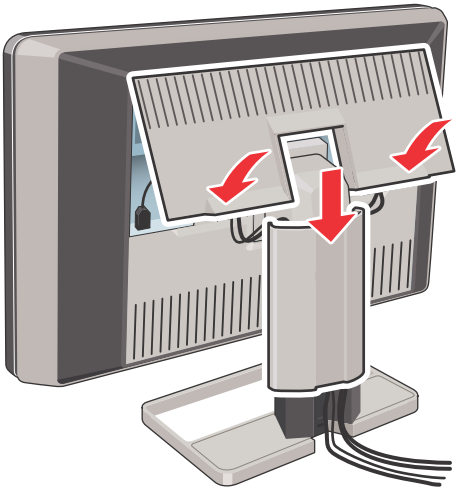


重装罩盖

1 向下滑动显示器支架罩将它重新装好。当显示器支架罩固定到位时，您将听到罩盖固定夹发出 “ 咔嗒 ” 声。

> 重装罩盖时请留意是否所有电缆都位于电缆通道内。

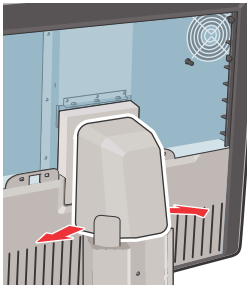
2 重新安装连接器舱盖时，将舱盖顶端滑入到位，然后推动舱盖底部。当连接器舱盖固定到位时，您将听到舱盖固定夹发出 “ 咔嗒 ” 声。



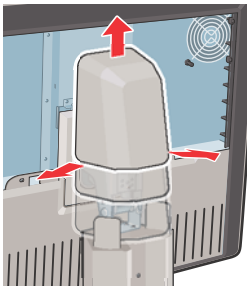
VESA 安装

面板与支架标准相连，可兼容 VESA 100 mm 标准。因此，它可以配合经 VESA 认证的支撑臂使用。本章将向您介绍如何将面板与支架分离以及如何将其连接到支撑臂上。如果您不使用支撑臂，可跳过本章。

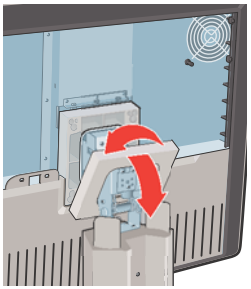
1 轻轻拉开罩盖下方两侧。



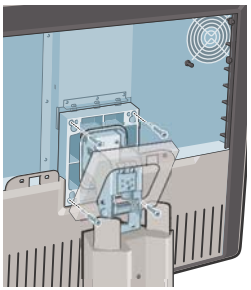
2 抓住拉开的下侧，同时向上滑动罩盖。



3 提起遮盖了面板到支架固定位置的塑料框。将它转动 45 度，露出固定螺丝。



4 松开将面板固定到支架的四个固定螺丝。



5 使用 4 个 M4 x 10 mm 螺丝将面板牢固地连接到支撑臂上。

您应当横向安装面板。可采用但不支持纵向位置。

使用至少可承重 20 公斤（44.09 磅）的支撑臂。承重能力过低可能会使面板跌落，对儿童或成人造成严重伤害并对设备造成严重损坏。

WARNING

切勿通过推拉显示屏本身来移动连接在支撑臂上的显示屏。正确的做法是，确认该支撑臂配有 VESA 认证的手柄，并使用该手柄移动显示屏。

请参阅支撑臂的使用说明书，了解更多信息和说明。

首次启动

现在您就可以首次启动您的 BARCO CORONIS 显示系统。

1 按第 24 页的 “ 待机切换 ” 中所述打开 CORONIS FUSION 6MP 显示器。

2 打开连接到显示器的计算机。

如果您已正确安装显示器和显示控制器，那么，开机程序一结束就会显示 Windows 启动消息。

首次启动时，您的 CORONIS FUSION 6MP 显示器将在基本视频模式下按默认的刷新率运行。
如果使用 Barco 显示控制器，请参考系统 CD 上提供的专用用户指南来安装驱动程序、软件和文档。安装完毕后，显示器将自动检测连接的视频输入信号并应用正确的视频模式和刷新率。

日常操作

日常操作建议

最大限度地延长显示器的使用寿命

启用您显示器的显示器电源管理系统 (DPMS)，使显示器在指定时间段内未使用时自动关闭背光，这将最大限度地延长其诊断使用寿命。默认情况下，显示器已启用 DPMS，但仍需在您的工作站上激活它。要执行此操作，请转到 “ 控制面板 ” 中的 “ 电源选项属性 ”。

Barco 建议将 DPMS 激活时间设置为在未使用 20 分钟后。

使用屏幕保护程序避免图像残留

当同一内容长时间停留在 LCD 的相同屏幕区域时，可能会造成某种形式的图像残留。

您可以使用屏幕保护程序避免或大幅减少这种现象的发生。您可以在您工作站的 “ 显示器属性 ” 窗口中激活屏幕保护程序。

Barco 建议将屏保设置为在未使用 5 分钟后激活。有效的屏幕保护程序会显示移动的内容。

如果您要连续几小时使用同一图像或带有静态图元的应用程序（这样不会激活屏幕保护程序），请定期变换图像内容以避免静态元素残留。

了解像素技术

LCD 显示屏使用基于像素的技术。作为 LCD 制造中的正常公差，有限数量的像素可能会保持不亮或常亮状态，这不会影响产品的诊断

性能。为确保最佳的产品质量，Barco 对其 LCD 显示面板采用严格的选择标准。

要了解更多有关 LCD 技术和图像坏点的信息，请参阅 www.barco.com/medical 上提供的专业白皮书。

提高用户舒适度

每个 Barco 多头显示器系统都采用当今最高规格的色彩匹配。

Barco 建议将色彩匹配的显示器保持在一起。另外，务必以相同速率使用多头配置的所有显示器，以便在系统的整个经济寿命期内保持色彩匹配。

最佳质量保证

“MediCal QAWeb” 系统提供高级质量保证在线服务，提供最高的诊断可信度和最长的运行时间。

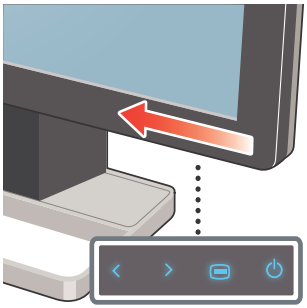
Barco 推荐安装 MediCal QAWeb Agent，并至少使用默认 QAWeb 政策。该政策包括定期校准。升级到 MediCal QAWeb 服务器将提供更多的可能性。
请访问 www.barco.com/medical/qa 了解更多信息，并注册免费的 MediCal QAWeb Essential （基本）级别。

按键指示灯

在默认情况下，按键指示灯将变暗，使其不可用。

要使按键亮起：

1 将手指轻轻扫过显示器下方右手侧。

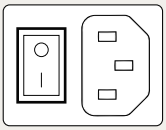


之后按键将亮起并可用于进一步操作。但是，如果在亮起后的 5 秒钟内未进行任何操作，按键指示灯将再次变暗。

> 按键指示灯自动变暗功能可通过 OSD 菜单禁用。请参阅第 29 页的 “ 按键指示灯 ”，了解关于该操作的详细说明。

待机切换

连接的电源也提供一个可用于彻底关闭电源的开关。要使用显示屏，请确保打开此电源开关。为此，可以将电源上的开关按到 “|” 位置。



在待机模式下打开显示器，或在开机模式下将显示器切换到待机模式，都可以通过使用按键或控制轮来完成。

使用按键打开显示器：

1 按上文所述亮起按键指示灯。

2 当按键指示灯亮起时，触摸待机 / 取消 ⏻ 键约 2 秒钟。

使用按键将显示器切换到待机模式：

1 按上文所述亮起按键指示灯。

2 当按键指示灯亮起时，触摸待机 / 取消 ⏻ 键，将会弹出一个窗口。再次按此按钮确认。

使用控制轮打开显示器：

1 按下控制轮约 2 秒钟。

使用控制轮将显示器切换到待机模式：

1 按控制轮一次，将弹出一个小窗口。再次按控制轮确认。

之后显示器将打开或切换到待机模式。当显示器打开时，电源状态指示灯将变暗。当显示器进入待机模式时，电源状态指示灯为橙色。

电源状态指示灯可通过 OSD 菜单启用，启用后，当显示器打开时，指示灯将变为蓝色。请参阅第 28 页的 “ 要启用 / 禁用电源状态指示灯： ”，了解关于该操作的详细说明。

在停电后恢复供电的情况下，您的显示器将始终启动为断电前的电源模式 （即待机或开机）。这可保护您的显示器，避免无意的图像残留问题。

打开 OSD 菜单

通过 OSD 菜单，您可以配置不同的设定项，使 Coronis Fusion 6MP 显示器满足您工作环境中的需要。您也可以通过 OSD 菜单来检索显示器的一般信息及其当前的配置设定。

使用按键打开 OSD 菜单：

1 如果尚未准备好执行此操作，请按上文所述打开显示器。

2 按上文所述亮起按键指示灯。

3 当按键指示灯亮起时，触摸菜单 / 输入 ⊟ 键。

使用控制轮打开 OSD 菜单：

1 如果尚未准备好执行此操作，请按上文所述打开显示器。
2 快速转动控制轮。

此时 OSD 主菜单将在屏幕的右下角打开。但是，如果在接下来的 90 秒内不进行任何其他操作，OSD 菜单将再次消失。

OSD 菜单自动关闭功能可通过 OSD 菜单禁用。请参阅第 28 页的 “OSD 菜单自动关闭功能 ”，了解关于该操作的详细说明。

OSD 菜单的位置可在 OSD 菜单中更改。请参阅第 27 页的 “OSD 菜单位置 ”，了解关于该操作的详细说明。

OSD 菜单导航

关于 OSD 菜单导航

OSD 菜单导航可以通过使用按键或控制轮来完成。

使用按键在 OSD 菜单中导航：

- 使用向右 / 向下 > 和向左 / 向上 < 键在 （子）菜单中移动、更改参数值或做出选择。
- 要进入子菜单或确认调整和选择，请使用菜单 / 输入 ⊖ 键。
- 使用待机 / 取消 ⏻ 键取消调整或退出 （子）菜单。
- 触摸待机 / 取消 ⏻ 键约 2 秒钟，退出 OSD 菜单。

使用控制轮在 OSD 菜单中导航：

- 旋转控制轮在菜单中移动、更改参数值或做出选择。
- 要进入子菜单或确认调整和选择，请快速按下控制轮。
- 按住控制轮约 2 秒钟取消调整或退出 （子）菜单。

高级操作

OSD 菜单位置

关于 OSD 菜单的位置

在默认情况下，OSD 菜单在屏幕的右下角打开。不过这一位置可以更改。可以从多个预定义的位置中选择。

要更改 OSD 菜单的位置：

1 打开 OSD 主菜单。

2 导航至配置 > 用户界面 > 菜单菜单。

3 进入位置子菜单。

4 选择一个可用的 OSD 菜单位置并确认。

OSD 菜单语言

关于 OSD 菜单语言

在默认情况下，OSD 菜单使用的语言为英语。不过 Coronis Fusion 6MP 显示器的 OSD 菜单还提供多种其他语言选择。

要更改 OSD 菜单语言：

1 打开 OSD 主菜单。

2 导航至配置 > 用户界面 > 菜单菜单。

3 进入语言子菜单。

4 选择一个可用语言并确认。

OSD 菜单自动关闭功能

关于 OSD 菜单自动关闭功能

在默认情况下，OSD 菜单将在闲置约 90 秒后自动消失。不过该功能可以禁用，使 OSD 菜单留在屏幕上直至手动关闭。

要启用 / 禁用 OSD 菜单自动关闭功能：

1. 打开 OSD 主菜单。
2. 导航至配置 > 用户界面 > 菜单菜单。
3. 进入自动关闭子菜单。
4. 根据需要选择启用 / 禁用并确认。

电源状态指示灯

关于电源状态指示灯

在默认情况下，当显示器打开时，电源状态指示灯将变暗。这一行为可以更改，这样，当显示器打开时，电源状态指示灯将为蓝色。

当显示器处于待机模式时，即使是在电源状态指示灯禁用的情况下，电源状态指示灯将始终变为橙色。

要启用 / 禁用电源状态指示灯：

1. 打开 OSD 主菜单。
2. 导航至配置 > 用户界面 > 指示灯菜单。
3. 进入电源状态子菜单。
4. 根据需要选择启用 / 禁用并确认。

按键指示灯

关于按键指示灯

默认情况下，如果在按键指示灯亮起后 5 秒钟内未进行任何操作，指示灯将再次变暗。不过这一行为可以更改，这样，按键指示灯将始终打开或始终关闭。

配置按键指示灯：

1 打开 OSD 主菜单。

2 导航至配置 > 用户界面 > 指示灯菜单。

3 进入按键子菜单。

4 根据需要选择自动 / 始终打开 / 始终关闭并确认。

电源锁功能

关于电源锁功能

通过启用电源锁功能，使 Coronis Fusion 6MP 显示器强行保持开机状态。这就是说，在电源锁功能再次禁用之前无法切换到待机模式。

要启用 / 禁用电源锁功能：

1 打开 OSD 主菜单。

2 导航至配置 > 用户界面 > 控件菜单。

3 进入电源锁子菜单。

4 根据需要选择启用 / 禁用并确认。

按键音

关于按键音

在默认情况下，每次触摸按键时按键都将发出蜂鸣声。不过这一声音可以禁用，这样，在使用按键时就不会听到任何声音。

要启用 / 禁用按键音：

1. 打开 OSD 主菜单。
2. 导航至配置 > 用户界面 > 控件菜单。
3. 进入声音子菜单。
4. 根据需要选择启用 / 禁用并确认。

基于 USB 的以太网

关于基于 USB 的以太网

默认情况下，基于 USB 的以太网处于禁用状态。但并不会禁用 USB 集线器，且可以使用显示屏的 USB downstream 连接器和其他与之相连接的外部设备 （键盘、鼠标等）。

请注意，为使用此功能，需要将电脑 USB downstream 连接器连接到显示器的 USB upstream 连接器。

启用基于 USB 的以太网后，内部 CORONIS FUSION 6MP 显示器处理器即可通过 USB 与相连电脑直接通信。

仅当您使用非 Barco 产品的显示控制器时推荐启用 USB 终点。如使用 Barco 显示控制器，将会通过连接的视频电缆自动开始通信。

启用 / 禁用基于 USB 的以太网：

1. 打开 OSD 主菜单。
2. 导航至配置 > 连接菜单。
3. 进入基于 USB 的以太网子菜单。
4. 根据需要选择启用 / 禁用并确认。

DDC HID 设备

关于 DDC HID 设备

默认情况下，DDC HID 设备处于启用状态。这将使内部 CORONIS FUSION 6MP 显示器处理器可以通过 USB 与相连电脑直接通信。

禁用 DDC HID 设备后，内部 CORONIS FUSION 6MP 显示器处理器将无法与相连电脑通信。但并不会禁用 USB 集线器，且可以使用显示屏的 USB downstream 连接器和其他与之相连接的外部设备（键盘、鼠标等）。

请注意，为使用此功能，需要将电脑 USB downstream 连接器连接到显示器的 USB upstream 连接器。

仅当您使用非 Barco 产品的显示控制器时推荐启用 USB 终点。如使用 Barco 显示控制器，将会通过连接的视频电缆自动开始通信。

启用 / 禁用 DDC HID 设备：

1. 打开 OSD 主菜单。
2. 导航至配置 > 连接菜单。
3. 进入 DDC HID 设备子菜单。
4. 根据需要选择启用 / 禁用并确认。

DPMS 模式

关于 DPMS 模式

在您的显示器上启用显示器电源管理系统 (DPMS) 模式，使显示器在指定时间段内未使用时自动关闭背光，这将最大限度地延长其诊断使用寿命。默认情况下，DPMS 模式可以在您的显示器上启用，但仍需在您的工作站上激活。要执行此操作，请转到您工作站的 “ 电源选项属性 ” 窗口。

Barco 建议将 DPMS 激活时间设置为在未使用 20 分钟后。

DPMS 模式在您的显示器上启用时，还可以使用额外的 OSD 省电功能：休眠。请参阅第 37 页的 “ 显示功能 ”，了解关于休眠功能及其如何启用的更多信息。

要在您的显示器上启用 / 禁用 DPMS 模式：

1 打开 OSD 主菜单。

2 导航至配置 > 电源管理菜单。

3 进入 DPMS 模式子菜单。

4 根据需要选择启用 / 禁用并确认。

休眠

关于休眠

启动休眠不仅会关闭背光，还会强制禁用显示器的其他功能，以便将能耗进一步降到最低。该情况会在一段特定时间后发生，此时间可以手动调整。

只有在显示器上先启用了 DPMS 模式后，才会启用休眠。因此，请参考第 32 页的 “DPMS 模式 ” 执行此操作。

在您的显示器上启用 / 禁用休眠：

1 打开 OSD 主菜单。

2 导航至配置 > 电源管理菜单。

3 进入休眠子菜单。

4 根据需要选择启用 / 禁用并确认。

指定休眠超时：

1 打开 OSD 主菜单。

2 导航至配置 > 电源管理菜单。

3 进入休眠超时子菜单。

4 设置所需的超时值并确认。

亮度目标

关于亮度目标

CORONIS FUSION 6MP 显示器的亮度目标可在预定义的范围内调节。更改亮度目标后，显示器将调节背光以达到该目标。

要设置亮度目标：

1 打开 OSD 主菜单。

2 导航至配置 > 校准菜单。

3 进入亮度目标子菜单。

4 根据需要设置亮度目标值并确认。

色彩预设

关于色彩预设

可用于您显示器的色彩预设有：

Clearbase	模拟 clearbase 胶片色温。
Bluebase	模拟 bluebase 胶片色温
用户	选择 “ 用户 ” 色温设置时，可在单独的子菜单中手动定义显示器色温的 X 和 Y 坐标。
原生白色	LCD 面板的原始、未修正的色温。

选择色彩预设：

1 打开 OSD 主菜单。

2 导航至配置 > 校准 > 颜色定义菜单。

3 进入色彩预设子菜单。

4 选择一个可用的色彩预设并确认。

色温

关于色温

您可以更改显示器的色温。

> 仅当色彩预设设置为 “ 用户 ” 时，才能更改您显示器的色温。因此，请参考第 32 页的 “DPMS 模式 ” 执行此操作。

更改色温：

1. 打开 OSD 主菜单。
2. 导航至配置 > 校准 > 色彩设置菜单。
3. 进入色彩定义子菜单。
4. 选择 “ 色温 ” 并确认。
5. 进入色温子菜单。
6. 设置所需的色温值并确认。

色坐标

关于色坐标

您可以更改显示器的色坐标。

> 仅当色彩预设设置为 “ 用户 ” 时，才能更改您显示器的色坐标。因此，请参考第 32 页的 “DPMS 模式 ” 执行此操作。

更改色坐标：

1 打开 OSD 主菜单。
2 导航至配置 > 校准 > 色彩设置菜单。
3 进入色彩定义子菜单。
4 选择色坐标并确认。
5 进入 X 和 / 或 Y 子菜单。
6 设置所需的 X 和 / 或 Y 的坐标值并确认。

查看模式

关于观看模式

CORONIS FUSION 6MP 显示器可用于两种查看模式：

诊断	此模式提供完全的校准亮度，主要适合在显示器用于诊断目的时使用。
文本	在此模式下，亮度减少到约一半。此模式主要适合在显示器用于文字处理等办公室应用时使用。

由于 CORONIS FUSION 6MP 显示器设计用于诊断环境，因此应始终选择诊断模式。

要选择查看模式：

1 打开 OSD 主菜单。
2 导航至配置 > 校准菜单。
3 进入查看模式子菜单。
4 根据需要选择诊断 / 文本并确认。

显示功能

关于显示功能

原有的、未经校正的面板将以同等亮度显示所有灰度 / 色彩级别。然而，研究表明，在医疗影像中，某些灰度 / 彩色部分要比其他部分包含更多的诊断信息。为反映这些结论，已定义显示功能。这些功能通过校正原有的面板行为，突出了这些包含重要诊断信息的部分。

原生	如果您选择 “ 原生 ”，将不会校正原有的面板行为。
Dynamic Gamma 1.8 Dynamic Gamma 2.2	这些是伽玛函数，转换到这些函数是为了考虑 LCD 显示面板在 “ 黑色 ” 信号驱动时的非零亮度。 它们在 CT 应用中改进低 Haunsfield 值的感知方面尤其有用。
DICOM	DICOM （医学数字成像和通信）是为改进放射学中数字图像的质量和通信而开发的一项国际标准。 简言之，DICOM 显示功能会增强图像中灰度的可视性。 Barco 建议在大多数医疗视像应用中选择 DICOM 显示功能。
用户	当显示功能由 MediCal QAWeb 定义时，将自动选择这一显示功能。
Gamma 1.8 Gamma 2.2	如果显示器要用伽玛 1.8 或 2.2 来代替 CRT 显示器，则从中选择一个显示函数。

要选择显示功能：

1. 打开 OSD 主菜单。
2. 导航至配置 > 校准菜单。
3. 进入显示器功能子菜单。
4. 选择一个可用的显示功能并确认。

环境光线补偿 (ALC)

关于 ALC

只有在选择了 DICOM 显示功能的情况下才能启用环境光线补偿 (ALC)。因此，请参阅第 37 页的 “ 显示功能 ” 正确设置显示功能。

ALC 启用后，将考虑预设的环境亮度修正值，重新计算 DICOM 显示函数。该值由选定的阅片室决定。因此，启用 ALC 时选择现实的阅片室也很重要。这一操作可遵循第 39 页的 “ 阅片室 ” 中的指示来完成。

要启用 / 禁用 ALC：

1. 打开 OSD 主菜单。
2. 导航至配置 > 校准 > 环境亮度菜单。
3. 进入环境光线补偿子菜单。
4. 根据需要选择启用 / 禁用并确认。

阅片室

关于阅片室

只有在选择了 DICOM 显示功能的情况下才能选择阅片室。因此，请参阅第 37 页的 “ 显示功能 ” 正确设置显示功能。

美国医学物理学家协会 (AAPM) 制定了一个预定义阅片室类型的列表。其中每一个阅片室都由以下参数定义：

- 此类阅片室中允许的最大亮度
- 此阅片室的预设环境亮度修正值

这些参数存储在您的显示器中，它们决定了在环境光线补偿 (ALC) 启用时 DICOM 显示函数的重新计算中需要考虑的预设环境亮度修正值。请参阅第 38 页的 “ 环境光线补偿 (ALC)” 启用 ALC。

可用于您的 Coronis Fusion 6MP 显示器的阅片室有：

CR/DR/MAMMO	与计算机放射学、数字放射学或乳房造影诊断阅片室的光线条件对应。此设置的最大环境亮度最低。
CT/MR/NM	与计算机断层扫描、磁共振或核医学扫描诊断阅片室的光线条件对应。
工作人员办公室	与办公室的光线条件对应。
临床观察室	与临床观察诊断阅片室的光线条件对应。
急诊室	与急诊室的光线条件对应。
手术室	与手术室的光线条件对应。此设置的最大环境亮度最高。

要选择阅片室：

1. 打开 OSD 主菜单。
2. 导航至配置 > 校准 > 环境亮度菜单。
3. 进入阅片室子菜单。
4. 选择一个可用阅片室并确认。

连续 ALC

关于连续 ALC

只有在选择了 DICOM 显示功能的情况下才能选择 “ 连续 ALC”。因此，请参阅第 37 页的 “ 显示功能 ” 正确设置显示功能。

启用连续 ALC 将会连续重新计算 DICOM 显示功能，计算中纳入平均环境亮度。

选择连续 ALC：

1. 打开 OSD 主菜单。
2. 导航至配置 > 校准 > 环境亮度菜单。
3. 进入连续 ALC 子菜单。
4. 选择一个可用阅片室并确认。

图像缩放

关于图像缩放

启用图像缩放功能将使单个像素成倍地放大到一个或多个邻近像素，从而使显示的图像大小为原始图像来源视频输入信号的多倍。

只有在您显示器的视频输入信号小于或等于显示器最高分辨率的一半时才能实现图像缩放。

要启用 / 禁用图像缩放：

1. 打开 OSD 主菜单。
2. 导航至配置 > 图像来源菜单。
3. 进入缩放子菜单。
4. 根据需要选择启用 / 禁用并确认。

图像来源选择模式

关于图像来源选择模式

您的 CORONIS FUSION 6MP 显示器会自动检测所连接的视频输入信号的数量，将它们连接到正确的显示侧并对其应用正确的视频设置（分辨率、视频编码模式、刷新率 . . . ）。然而，有时可能需要手动选择在显示屏某一侧显示的视频输入信号，或者自行调节某些视频设置。其第一步就是从适用于您显示器的以下图像来源选择模式中选择一个：

自动	在此模式下，您的显示器会自动检测所连接的视频输入信号，将它们连接到正确的显示侧并对其应用正确的视频设置（分辨率、视频编码模式、刷新率 . . . ）。 选择此模式时所有视频设置均不可用。

单一图像来源	此模式用于显示和手动配置仅一个连接的视频输入信号。 选择此模式时，所选视频输入信号的视频设置可用。
两个图像来源	此模式用于显示和手动配置两个连接的视频输入信号（每个显示侧各一个）。 选择此模式时，在显示器各侧所选视频输入信号的视频设置可用。

要选择图像来源选择模式：

1 打开 OSD 主菜单。

2 导航至配置 > 图像来源菜单。

3 进入图像来源选择子菜单。

4 选择一个可用的图像来源选择模式并确认。

视频输入信号

关于视频输入信号

您的 CORONIS FUSION 6MP 显示器会自动检测连接的视频输入信号。您可以手动选择图像来源视频输入信号，但前提是您显示器的图像来源选择模式应当设置为允许这么做。请参考第 41 页的 “ 图像来源选择模式 ” 执行此操作。

可用于您显示器的输入信号有：

DisplayPort 1	此输入与 “ 部件、控制器和连接器 ” 部分中所示的 DisplayPort 1 连接器对应。
DVI 1	此输入与 “ 部件、控制器和连接器 ” 部分中所示的 DVI 1 连接器对应。

DisplayPort 2	此输入与 “ 部件、控制器和连接器 ” 部分中所示的 DisplayPort 2 连接器对应。
DVI 2	此输入与 “ 部件、控制器和连接器 ” 部分中所示的 DVI 2 连接器对应。

要手动选择视频输入信号：

1 打开 OSD 主菜单。

2 导航至配置 > 图像来源 > （左 / 右）图像来源菜单。

3 进入输入信号子菜单。

4 选择一个可用输入信号并确认。

视频编码模式

关于视频编码模式

您的 Coronis Fusion 6MP 显示器会自动检测连接的视频输入信号并应用正确的视频编码设置。您可以手动选择视频编码模式，但前提是您显示器的图像来源选择模式应当设置为允许这么做。请参考第 41 页的 “ 图像来源选择模式 ” 执行此操作。

视频编码模式指定如何在视频信号中对色彩和亮度信息进行编码。在消费类显示器中，这通常是由一个有限的 8 位编码机制来完成。然而，您的 Coronis Fusion 6MP 显示器具有 10 位编码功能，能够更好地映射 DICOM 定义的灰度范围。要符合最新医疗指导中提出的指导原则，必须具备这一宽广的范围。

可用于您显示器的视频编码模式如下。

请注意，连接到您显示器的显示控制器不一定支持所有这些视频编码模式。

标准	此模式使用标准的 8 位编码机制。

HDR1	此模式具有依循高动态范围 (HDR) 标准的 10 位视频编码功能，通常用于彩色显示器。
HDR2	HDR2 是 Barco 的特殊模式，具有依循高动态范围 (HDR) 标准的 10 位视频编码功能，但是允许全刷新率 (HDR1 不一定允许)。此模式通常用于彩色显示器。
Dual 10	Dual 10 是 Barco 的特殊 10 位视频编码模式，通常用于灰度显示器，且允许全刷新率。
自动	选择此选项时，您的 CORONIS FUSION 6MP 显示器将自动向连接的视频输入信号分配正确的视频编码设置。

要手动选择视频编码模式：

1 打开 OSD 主菜单。

2 导航至配置 > 图像来源 > （左 / 右）图像来源菜单。

3 进入视频编码子菜单。

4 选择一个可用的视频编码模式并确认。

灰度转换模式

关于灰度转换模式

> 您的 CORONIS FUSION 6MP 显示器会自动检测连接的视频输入信号并应用正确的灰度转换设置。您可以手动选择灰度转换模式，但前提是您显示器的图像来源选择模式应当设置为允许这么做。请参考第 41 页的 “ 图像来源选择模式 ” 执行此操作。

灰度转换模式指定如何将显示控制器上生成的色彩转换为您显示器中的灰度。

可用的灰度转换模式有：

使用红色通道	此模式适用于通过红色通道发送灰色的灰度显示器。
使用绿色通道	此模式适用于通过绿色通道发送灰色的灰度显示器。
使用蓝色通道	此模式适用于通过蓝色通道发送灰色的灰度显示器。
使用所有通道	此模式适用于通过红色、绿色和蓝色通道发送灰色的灰度显示器。这是通过标准转换机制来完成的，其中使用了 30% 的红色、59% 的绿色和 11% 的蓝色来生成灰色。

要手动选择灰度转换模式：

1. 打开 OSD 主菜单。
2. 导航至配置 > 图像来源 > （左 / 右）图像来源菜单。
3. 进入灰度转换子菜单。
4. 选择一个可用的色彩转换模式并确认。

EDID 定时

关于 EDID 定时

> 您的 CORONIS FUSION 6MP 显示器会自动调节连接的视频输入信号并根据首选的 EDID 定时应用正确的定时。要手动配置这些 EDID 定时，您显示器的图像来源选择模式应当设置为允许这么做。请参考第 41 页的 “ 图像来源选择模式 ” 执行此操作。

您的 CORONIS FUSION 6MP 显示器可用以下 EDID 定时：

分辨率	允许手动修改图像来源视频输入信号的分辨率。
刷新率	允许根据连接到您显示器的显示控制器的最大刷新率，来手动选择图像来源视频输入信号的刷新率。
首选方向	允许将图像来源视频输入信号的方向更改为横向、纵向或者让显示器自动分配正确的方向。
色深	可将色深改为 8 或 10 比特。

手动设置 EDID 定时：

1 打开 OSD 主菜单。

2 导航至配置 > 图像来源 > （左 / 右）图像来源菜单。

3 进入 EDID 定时子菜单。

4 选择分辨率、刷新率、首选方向或色深。

5 选择一个可用设置并确认。

显示器信息

关于显示器信息

您显示器的序列号、色彩类型、原始分辨率、固件版本等在 OSD 菜单的专门子菜单中提供。

要检索关于您显示器的信息：

1 打开 OSD 主菜单。

2 导航至关于此显示器菜单。

3 根据需要进入显示器或固件子菜单。

显示器状态

关于显示器状态

OSD 菜单的 “ 状态 ” 子菜单提供关于您显示器当前状态 （运行时间、温度等）、相连图像来源的状态 （视频编码模式、定时等）以及您显示器的当前校准状态 （显示功能、亮度、ALC 等）的信息。

要检索您显示器的状态：

1 打开 OSD 主菜单。

2 导航至状态菜单。

3 根据需要进入显示器、图像来源、校准或连接子菜单。

清洁显示器

前玻璃基板

使用以下任一经过测试的产品稍微沾湿的海绵、清洁布或柔软织物清洁前玻璃基板：

- Flux
- Windex Glass Plus
- Bohle 玻璃清洁剂
- Mr. Proper
- Pril
- Ajax 玻璃清洁剂
- Sidolin 玻璃清洁剂
- 25% 乙醇溶液 (EtOH)

如果没有以上清洁产品，请使用清水。

⚠ 小心不要损坏或划伤前玻璃基板。注意戒指或其他饰品，同时切勿对前玻璃基板过度施力。

⚠ 请勿将液体直接涂抹或喷洒于前玻璃基板上，因为多余的液体可能会导致内部电子元件损坏。而应将清洁布以液体沾湿使用。

⚠ 请勿使用以下产品：

- 浓度 > 5% 的高浓度酒精 / 溶剂
- 强碱水、强溶剂
- 酸
- 含氟清洁剂
- 含氨清洁剂
- 磨砂清洁剂
- 钢丝绒
- 磨砂海绵
- 刮刀
- 钢丝布

外壳

1 使用一块以获得认可的医疗设备清洁产品稍微沾湿的软棉布来清洁外壳。

外壳经测试可使用以下产品：

- Cidex、Betadine
- 酒精 （异丙醇和乙醇）
- 氨基清洁剂 (Windex)
- Aquasonic Gel

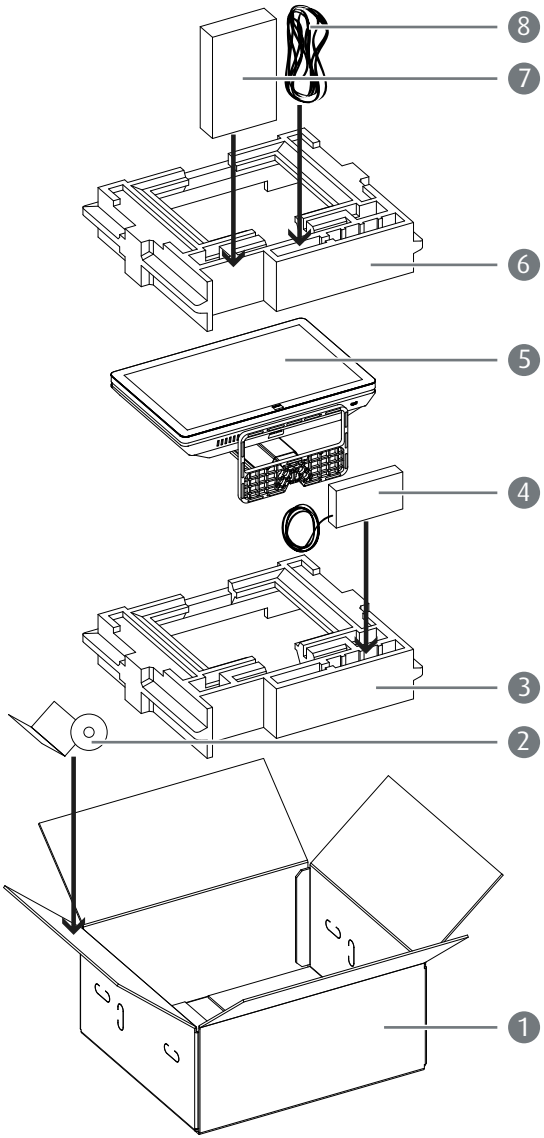
如果没有以上清洁产品，请使用清水。

> ⚠ 请勿将液体直接涂抹或喷洒于外壳上，因为多余的液体可能会导致内部电子元件损坏。而应将清洁布以液体沾湿使用。

2 用水再次清洁。

3 用干抹布擦干。

重新包装说明



1	箱子	2	系统 CD + 用户指南
3	底部垫层	4	电源
5	CORONIS FUSION 6MP 显示器	6	顶部垫层
7	显示器控制器盒	8	缆线 （视频线、USB 线、电源线）

1 将空箱子安放在稳固的台面上。

2 滑动箱内随附的专用袋里的系统 CD 和用户指南。

3 在箱中放置底部垫层。

4 将电源置于底部垫层的专设凹陷处。

5 将 CORONIS FUSION 6MP 显示器放在其原始的包装袋中，并让其面板朝上置于箱中。

6 将顶部垫层置于显示器上方。

7 如适用，将显示控制器盒滑动至垫层上专设的凹陷处。

8 将所有缆线 （视频线、USB 线、电源线）置于其原始包装袋中，并将其滑动至垫层上专设的凹陷处。

9 关闭并密封包装箱。

重要信息

安全信息

一般建议

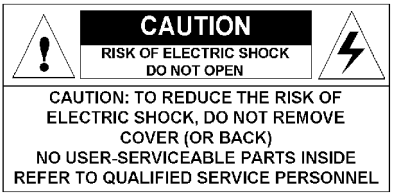
在操作设备之前仔细阅读安全与操作说明。

妥善保管安全与使用说明书以供日后参考。

遵照设备及使用说明手册中的所有警告信息进行操作。

遵循所有操作和使用说明。

电击



保护类型 （电气）：

带外部电源的设备：I 类设备

安全程度 （易燃麻醉剂混合物）：

设备不适合在有易燃麻醉剂与空气、氧气或氧化亚氮混合物的环境中使用。

非患者护理设备

设备主要在医疗机构中使用，适用于不可能接触患者的环境。

电源连接 — 带 24 VDC 外部电源的设备

- 电源要求：设备必须使用附带的通过医疗认证的 24 V 直流 SELV （安全特低电压）电源供电。
- 通过医疗认证的直流电源必须由交流总线电压 （保护性接地端子）供电。

电源线：

- 采用 UL 认证的可分离型电源线，规格为 3 芯、SJ 型或同等类型、最小 18 AWG、最小额定电压 300 V，同时配备医院级 120V 用 5-15P 插头或者 240V 用 6-15P 插头结构。
- 切勿使壁装电源插座和延长线过载，以免造成火灾或电击。
- 电源导线保护 （美国：电源线）：应将电源线放在不易被人踩到或被上方或靠着的物品挤压的地方，并特别注意电源线的插头和插座位置。

防水防潮

切勿让设备淋雨或受潮。

切勿在靠近水源的地方使用设备 – 例如浴缸、脸盆、游泳池、洗碗池、洗衣盆旁边或潮湿的地下室中。

通风

切勿盖住或堵塞显示器外壳上的通风孔。将设备安放在壁橱或其他密闭位置时，注意在设备与壁橱侧面之间要保留一定的空隙。

安装

设备应放置在可支撑至少三台显示器重量的平整、结实而稳固的表面上。如果放置在不稳定的推车或支架上，设备可能会掉落，从而对儿童或成人造成严重的人身伤害，并造成设备严重损坏。

本装置符合：

CE0120 （MDD 93/42/EEC IIb 类产品）、2004/108/EC 指令、第二版 IEC 60950-1:2005、DEMKO – EN 60601-1:2006、VCCI、FCC B 类、FDA 510(K)、RoHS、KCC、第三版 IEC 60601-1:2005、ANSI/

AAMI ES 60601-1:2005、CAN/CSA-C22.2 No. 60601-1 (2008)、CCC - GB9254-2008 + GB4943.1-2011 + GB17625.1-2003、ICES-001 B 级。

CL. 1.7.2 标准在北欧国家的语言偏差：

芬兰语：“Laite on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan”
挪威语：“Apparatet må tilkoples jordet stikkontakt”
瑞典语：“Apparaten skall anslutas till jordat uttag”

环保信息

弃置信息 （废弃电气电子设备）

产品上的这一标志表明，根据管辖电气电子设备废物的 2002/96/EC 欧洲指令，本产品不得与其他城市垃圾一同弃置。请将您的废弃设备交给指定的回收点，以便再利用废弃电气电子设备。为防止任意的废物处置可能对环境或人体健康造成的危害，请负责地将这些设备与其他类型的废物分开并回收利用，以促进物质资源的可持续利用。

有关本产品回收的更多信息，请联系您当地的市政办公室、城市废物处理服务机构或您购买产品的商店。

土耳其 RoHS 合规性

土耳其共和国：符合 EEE （电气电子设备）法规
Türkiye Cumhuriyeti: EEE Yönetmeli?ine Uygundur

中国大陆 RoHS（Chinese Mainland RoHS）

根据中国大陆“电子信息产品污染控制管理办法”（也称为中国大陆 RoHS），以下部分列出了 Barco 产品中可能包含的有毒和/或有害物质的名称和含量。中国大陆 RoHS 指令包含在中国信息产业部 MCV 标准：“电子信息产品中有毒物质的限量要求”中。

According to the "China Administration on Control of Pollution Caused by Electronic Information Products" (Also called RoHS of Chinese Mainland), the table below lists the names and contents of toxic and/or hazardous substances that Barco's product may contain. The RoHS of Chinese Mainland is included in the MCV standard of the Ministry of Information Industry of China, in the section "Limit Requirements of toxic substances in Electronic Information Products".

零件项目（名称） Component Name	**有毒有害物质或元素** Hazardous Substances or Elements					
	铅 (Pb)	**汞** (Hg)	**镉** (Cd)	**六价铬** (Cr6+)	**多溴联苯** (PBB)	**多溴二苯醚** (PBDE)
印制电路配件 Printed Circuit Assemblies	X	0	0	0	0	0
液晶面板 LCD panel	X	0	0	0	0	0
外接电（线）缆 External cables	X	0	0	0	0	0
内部线路 Internal wiring	0	0	0	0	0	0
金属外壳 Metal enclosure	0	0	0	0	0	0
塑胶外壳 Plastic enclosure	0	0	0	0	0	0
散热片（器） Heatsinks	0	0	0	0	0	0

风扇 Fan	O	O	O	O	O	O
电源供应器 Power supply unit	X	O	O	O	O	O
文件说明书 Paper manuals	O	O	O	O	O	O
光盘说明书 CD manual	O	O	O	O	O	O

O：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。
O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.

X：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。
X：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。

在中国大陆销售的相应电子信息产品（EIP）都必须遵照中国大陆《电子信息产品污染控制标识要求》标准贴上环保使用期限（EFUP）标签。Barco 产品所采用的 EFUP 标签（请参阅实例，徽标内部的编号使用于制定产品）基于中国大陆的《电子信息产品环保使用期限通则》标准。

All Electronic Information Products (EIP) that are sold within Chinese Mainland must comply with the "Electronic Information Products Pollution Control Labeling Standard" of Chinese Mainland, marked with the Environmental Friendly Use Period (EFUP) logo. The number inside the EFUP logo that Barco uses (please refer to the photo) is based on the "Standard of Electronic Information Products Environmental Friendly Use Period" of Chinese Mainland.

合规信息

使用说明：Coronis Fusion 6MP

Coronis Fusion 6MP DL (MDCC-6230) 显示器是可以在一块面板上显示以电子方式融合在一起的两张 3MP 显示图像的显示设备。该产品适合在数字影像的显示和查看中使用，由经过专业训练的执业医师用于检查和分析。该产品在 0.1995 毫米的像素间距中提供了 3280 x 2048 像素的屏幕分辨率。这提供了 2 x 3MP 的同等分辨率显示。

Coronis Fusion 6MP DL (MDCC-6230) 显示器不适用于对乳腺 X 线摄影图像的主要诊断。

注意 （美国）：联邦法律规定此设备仅由经过设备使用培训的医师或执业者销售或在其指示下销售。

FCC B 类

本设备符合 FCC （美国联邦通信委员会）规定第 15 部分。设备操作受以下两个条件制约：(1) 本设备不得造成有害干扰，并且 (2) 本设备必须能够抵抗任何干扰，包括可能引起不必要操作的干扰。

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- 使设备远离接收装置。
- 将设备插入另一线路的插座中，与接收装置连接的线路分开。
- 咨询代理商或有经验的无线电 / 电视技术员寻求帮助。

加拿大通告

此 ISM 设备符合加拿大 ICES-001。
Cet appareil ISM est conforme à la norme NMB-001 du Canada.

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c UL us 或者 CLASSIFIED c UL us	表示显示器通过 c-UL 法规认证
D	表示显示器通过 DEMKO 法规认证
CCC	表示显示器通过 CCC 法规认证
VCCI	表示显示器通过 VCCI 法规认证
	表示显示器上的 USB 连接器
	表示生产日期
15 35	表示显示器按规格运行的温度限制
SN	表示显示器序列号
	参阅操作说明

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技术规格

Coronis Fusion 6MP

产品缩写	MDCC-6230
屏幕技术	TFT AM 彩色 LCD 双域 IPS-Pro
活动屏幕尺寸 （对角线）	772 mm (30.4″)
活动屏幕尺寸 （水平 x 垂直）	654 x 409 mm (25.8 x 16.1″)
屏幕纵横比 （水平：垂直）	16:10
分辨率	原有 6MP (3280 x 2048) 可配置为 2 x 3MP+ (1640 X 2048) 可配置为 2 x 3MP (1536 X 2048)
像素间距	0.1995 mm
彩色成像	是
灰度成像	是
色彩支持	30 位
可视角度 （水平、垂直）	178°
均匀亮度技术 (ULT)	是
每像素均匀度 (PPU)	否
环境光线补偿 (ALC)	是
背光输出稳定 (BLOS)	是 (2x)
I-Guard	是
最大亮度 *	720 cd/m²
DICOM 校准亮度 （ULT 关闭）*	500 cd/m²
对比度 （典型）*	1000:1 （显示器面板通用）
响应时间 (Tr + Tf)	18 ms

扫描频率 （水平；垂直）	30-150 kHz； 15-80 Hz
外壳颜色	黑色 / 银灰色
视频输入信号	DVI-D 双链路 (2x)、DisplayPort (2x)
视频双向端口	不适用
USB 端口	1 个上游 （终点），3 个下游
USB 标准	2.0
电源要求 （标称）	100-240V
功耗 （标称）	125W
省电模式	是
电源管理	DVI-DMPM、DP-DMPM
点时钟	280 MHz
OSD 语言	英语、德语、法语、荷兰语、西班牙语、意大利语、葡萄牙语、波兰语、俄语、瑞典语、中文（简体）、日语、韩语、阿拉伯语
带支架尺寸 （宽 x 高 x 厚）	纵向：不适用 横向：731 x 580~676 x 265 mm
不带支架尺寸（宽 x 高 x 厚）	纵向：不适用 横向：731 x 485 x 141 mm
包装尺寸 （宽 x 高 x 厚）	869 x 764 x 400 mm
带支架净重	26.5 kg
不带支架净重	20 kg
带支架包装净重	36.5 kg
不带支架包装净重	不适用
高度调节范围	96 mm
倾斜	-5° / +25°
旋转	-45° / +45°
转动	不适用

安装标准	VESA (100 mm)
屏幕保护	防护性、非反光玻璃罩
推荐模态	CT （计算机化断层显象）、MR （磁共振成像）、US （超声扫描显像）、DR （数字化放射成像）、CR （计算机化放射成像）、NM （核医学成像）、胶片
认证	CE0120 （MDD 93/42/EEC IIb 类产品）、2004/108/EC 指令、第二版 IEC 60950-1:2005、DEMKO - EN 60601-1:2006、VCCI、FCC B 类、FDA 510(K)、RoHS、KCC、第三版 IEC 60601-1:2005、ANSI/AAMI ES 60601-1:2005、CAN/CSA-C22.2 No. 60601-1 (2008)、CCC - GB9254-2008 + GB4943.1-2011 + GB17625.1-2003、ICES-001 B 级。
提供的附件	入门指南 快速安装单 视频线 （2x DVI 双链路、2x DisplayPort） 主电缆 （英国、欧洲 [CEBEC/KEMA]，美国 [UL/CSA；适配插头 NEMA 5-15P]，中国 [CCC]） USB 2.0 电缆 外部电源
可选附件	不适用
QA 软件	MediCal QAWeb
每托盘单位	不适用
托盘尺寸	不适用
保修	5 年
工作温度	0° C 至 35° C （规格内 15° C 至 30° C）
贮存温度	-20° C 至 60° C
工作湿度	8% - 80% （无冷凝）
贮存湿度	5% - 93% （无冷凝）
工作海拔	2000 m

* 在黑暗阅片室条件下 (0 lux)

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